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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,158	06/25/2003	Koichi Yamada	42P15793	5608

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EXAMINER	
RIAD, AMINE	
ART UNIT	**PAPER NUMBER**
2113	

DATE MAILED: 03/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/607,158	YAMADA, KOICHI	
	Examiner	Art Unit	
	Amine Riad	2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *6/25/2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 June 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892) AK

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

Detailed Action

Claims 1-26 have been presented for examination.

Claims 1-26 have been rejected.

Objections

Claim 8 recites "the machine error information to include an operation mode of *the an affected* ". It appears that the article "an" is superfluous, and needs to be removed.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 13-26 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 13-19 are not limited to tangible embodiments. In view of applicant's disclosure [specification page 13; paragraph 45], the medium is not limited to tangible embodiments, instead being defined as including both tangible embodiment for example [solid-state memories, optical and magnetic disks] and intangible embodiments for example [carrier wave signals]. As such, the claim is not limited to statutory subject matter and is therefore non-statutory.

Claims 20-26 recite " means for ". The recited invention is software [Operating System (specification page 2; paragraph 23 "The following method describes how the **operating system** may identify and terminate the affected application ")]. Software is merely a set of instructions capable of being executed by a computer. The software itself is not a

statutory process in that it does not include the computer-readable medium needed to realize the functionality of the software.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-5, 7-17, 19-24, and 26 are rejected under 35 U.S.C. 102(a) as being anticipated by Mathur U.S. Patent 6,938,254.

In regard to claims 1, 13, and 20 Mathur discloses a method of terminating an affected application program thread (Column 4; line 37-39), comprising: receiving an indication of a hardware error associated with an application program thread (Column 4; line 56-57 prompting the user is considered an indication); determining the application program thread to be in a user operation mode (Column 4; line 57 when the user selects a currently executing application program to be terminated this is considered a user operation mode); and terminating the application program (Column 4; line 65-66).

In regard to claims 2, 14, and 21 Mathur discloses the method of claim 1, wherein the terminating the application program further comprises:

determining the hardware error is a memory read error the memory read error being associated with the application program thread (Column 4; line 50-52 when the current memory usage or availability is compared against threshold usage or availability that it is deemed to be most critical, the system determines that the hardware error is a memory read error).

In regard to claims 3, 15, and 22 Mathur discloses the method of claim 2, further comprising: determining the memory read error is successfully contained (Column 5; line 1-2 upon terminating the application which was the source of the hardware error, Mathur successfully contains the memory read error) and (Figure 3; item 104).

In regard to claims 4, 16, and 23 Marthur discloses the method of claim 3, further comprising: receiving information of whether the memory read error is contained (Column 4; line 65-67 when the user is informed that memory is critically low, and is forced to choose which application should shut down, this is considered as an information message).

In regard to claims 5, 17, 24 Marthur discloses the method of claim 2, further comprising: receiving information of whether the hardware error occurred on a memory read (Column 4; line 62-63 this is inherent because the message "system out of

memory dialog" during **program execution** means hardware error occurred during reading the memory).

In regard to claims 7, 19, and 26 Mathur discloses the method of claim 1, further comprising: confirming one or more registers associated with the application program thread are consumed (Column 5; line 3-5 and all resources used by the program are closed or freed this means that the register associated with the application thread is consumed).

In regard to claim 8, Mathur discloses system comprising:

a processor (Figure 2; item 40) to perform an instruction from an operating system

and a memory component (Figure 2; item 42) to provide machine error information to the operating system (Figure 2; item 44);

the machine error information to include an operation mode of the affected application program, (Column 4; line 62-63 "System out of memory dialog" and Column 4; line 65 when the system informs the user that memory is critically low it informs the user that the application is in the user mode).

the operating system to terminate the affected application program thread (Column 2; line 37-38) upon determining the affected application program to be within a user operation mode.

In regard to claim 9, Mathur discloses the system of claim 8, wherein the processor is to receive an instruction (Column 3; line 37) from the operating system to terminate the affected application program thread upon determining a memory read error has occurred (Column 4; line 37-39).

In regard to claim 10, Mathur discloses the system of claim 9, wherein the processor is to receive an instruction from the operating system to terminate (Column 2; line 37-38) the affected application program thread upon determining the memory read error is contained (Column 5; line 1-2 upon terminating the application which was the source of the hardware error, Mathur successfully contains the memory read error) and (Figure 3; item 104).

In regard to claim 11, Mathur discloses the system of claim 9, wherein the operating system is to check the machine error information message to determine whether the memory read error occurred (Column 5; line 10) and (Figure 3; Step 100) [by comparing the system is checking the machine error information].

In regard to claim 12, Mathur discloses the system of claim 11, wherein the operating system is to check the machine error information message to determine whether the memory read error is contained (Column 6; line 4-5 when he message is sent to terminate the error it means that the error has been contained).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6,18, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable in view of Mathur over Gilbertson U.S. Patent 6,594,785.

In regard to claims 6, 18, and 25 Mathur discloses the limitation of parent claims 1, 13, and 20.

Mathur dos not disclose receiving information of poisoned data address associated with the hardware error.

Gilbertson teaches information reception of poisoned data (abstract; " poisoning of specific memory location") address associated with the hardware error (Column 23; line 16-20). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate information reception of poisoned data address of Gilbertson into the method, the machine, and the system of Mathur. A person of ordinary skill in the art would have been motivated to make this modification because Mathur discloses " it is conceivable that other programs might find themselves without enough memory to continue. Even worse, it is possible that the operating system itself could be unable to obtain needed memory, thereby causing a system crash". In addition Gilbertson discloses " What is needed is a system and a method for recovering from an error within a first partition (that would have he first program for example) without affecting a second partition that shares main memory [operating system in the previous disclosure] segments with the failing partition ".

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S patent 5,305,455 teaches most of the limitations, but lacks the hardware error detection, on the other hand U.S. patent 6,593,940 contains some elements, but lacks an important element, which is the termination of the thread upon hardware error detection See PTO 892.

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amine Riad whose telephone number is 571-272-8185. The examiner can normally be reached on 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on 571-272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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